RULE

Department of Environmental Quality
Office of the Secretary
Legal Affairs Division

Lyondell Delisting Petition (LAC 33:V.4999) (HW099P)

Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary has amended the Hazardous Waste regulations, LAC 33:V.4999.Appendix E (Log #HW099P).

Lyondell Chemical Company petitioned to exclude from the hazardous waste regulations (delist) the company's incinerator direct contact cooling wastewater and fire suppression automatic sprinkler ("deluge") system wastewater. The incinerator design uses direct contact cooling water to quench and scrub hot combustion gases resulting from the destruction of the listed hazardous waste. This primary cooling wastewater is blown down and pH-adjusted before being discharged at an LPDES-permitted outfall. Also, when the normal cooling water system fails, wastewater may be generated from the activation of the fire suppression automatic sprinkler ("deluge") backup system for the incinerator. The cooling wastewater effluent is currently being discharged after treatment under the facility's LPDES permit. After delisting, this effluent will continue to be discharged under the facility's LPDES permit. Routine operational and regulatory costs for Lyondell will not change. Lyondell is seeking agency approval to delist, or exclude, the wastewater from the definition of "derived from" hazardous waste to reduce its potential liability resulting from an unplanned, non-recurring cooling system release (spill or leak) or catastrophic event (fire).

The delisting program is regulated by LAC 33:V.105, which includes a formal rulemaking process. Applicants who wish to remove a waste from the list of hazardous wastes must submit a petition and satisfy all requirements of LAC 33:V.105. The department has reviewed Lyondell's petition and found that it satisfies the delisting requirements in LAC 33:V.105.M. The department used the Delisting Risk Assessment Software (DRAS) in the evaluation of the impact of the petitioned waste on human health and the environment. The department's action granting the petition is based on an evaluation of waste-specific information provided by the petitioner. Based on the information submitted by Lyondell, the results of the analytical data, and the results of the DRAS, the department has determined that the nature of this material does not warrant retaining the material as a hazardous waste.

Also included in this rule is a reorganization of Table 1 in LAC 33:V.4999.Appendix E, such that the entries are listed in alphabetical order by facility name. Another clarification made is that facilities granted one-time exclusions, as opposed to conditional exclusions, are moved from Table 1 to Table 2. The basis and rationale for this rule are to grant the petition on an evaluation of waste-specific information provided by the petitioner. This rule meets an exception listed in R.S. 30:2019(D)(2) and R.S. 49:953(G)(3); therefore, no report regarding environmental/health benefits and social/economic costs is required.

Title 33 ENVIRONMENTAL QUALITY

Part V. Hazardous Waste and Hazardous Materials Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 49. Lists of Hazardous Wastes

§4999. Appendices—Appendix A, B, C, D, and E, and F Appendix A. – D. ...

Appendix E. Wastes Excluded under LAC 33:V.105.M

A. Each facility granted a conditional exclusion must comply with the specific conditions for the waste exclusion as listed in Table 1 of this Appendix. Each facility granted a one-time exclusion is listed in Table 2 of this Appendix. Each waste exclusion listed in Table 1 shall begin with a waste description and include details for the following conditions:

A.1. - B.3.b. ...

Table 1 - Wastes Excluded BFI Waste Systems of Louisiana LLC, Colonial Landfill, Sorrento, LA

* * *

[see prior text]

Table 1 - Wastes Excluded DuPont Dow Elastomers LLC, LaPlace, LA

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[see prior text]

Table 1 – Wastes Excluded

Lyondell Chemical Company, Lake Charles, LA

Incinerator direct contact cooling wastewater and fire suppression automatic sprinkler ("deluge") system wastewater are generated at a maximum annual generation rate of 800,000 cubic yards (162 million gallons) per year. Lyondell's wastestream includes the United States Environmental Protection Agency (USEPA) hazardous waste codes D001, D019, D021, D030, F002, F003, K027, K112-114, U037, U221, and U223. The constituents of concern for these waste codes are listed in LAC 33:V.4901. This exclusion applies only to incinerator direct contact cooling wastewater and fire suppression automatic sprinkler ("deluge") system wastewater at the Lake Charles, LA facility. The cooling wastewater effluent is currently being discharged after treatment under the facility's LPDES permit. After delisting, this effluent will continue to be discharged under the facility's LPDES permit.

(1). Testing

Sample collection and analyses, including quality control (QC) procedures, must be performed according to methods described in *Test Methods for Evaluating Solid Waste*, *Physical/Chemical*

Methods, EPA Publication SW-846, as incorporated by reference in LAC 33:V.110.

(1)(A). Inorganic Testing

During the first 12 consecutive months of this exclusion, Lyondell must collect and analyze one monthly grab water sample from the fire water pond and one monthly grab water sample from the incinerator blowdown stream. These two monthly samples must be analyzed for the constituents listed in condition (3)(A) prior to disposal of the source water. Lyondell must report to the department the unit operating conditions and analytical data (reported in milligrams per liter), for arsenic, barium, chromium, lead, nickel, vanadium, and zinc, including quality control information. If the department and Lyondell concur that the analytical results obtained during the 12 monthly testing periods have been significantly below the delisting levels in condition (3)(A), Lyondell may replace the testing required in condition (1)(B).

(1)(B). Subsequent Inorganic Testing

After concurrence by the department, Lyondell may substitute the following testing conditions for those in condition (1)(A). Lyondell must continue to analyze quarterly grab water samples from the fire water pond and the incinerator blowdown stream. Lyondell must report to the department the unit operating conditions and analytical data (reported in milligrams per liter), for arsenic, barium, chromium, lead, nickel, vanadium, and zinc, including quality control information. Grab water samples from the fire water pond and the incinerator blowdown stream must be taken during the first month of each quarterly period. These quarterly samples must be analyzed for the constituents listed in condition (3)(A) prior to disposal of the source water. If delisting levels for any constituents listed in condition (3)(A) are exceeded in any quarterly sample, Lyondell must re-institute testing as required in condition (1)(A).

(1)(C). Organic Testing

During the first 12 consecutive months of this exclusion, Lyondell must collect and analyze one monthly grab water sample from the fire water pond and one monthly grab water sample from the incinerator blowdown stream. These two monthly samples must be analyzed for the constituents listed in condition (3)(B) prior to disposal of the source water. Lyondell must report to the department the unit operating conditions and analytical data (reported in milligrams per liter), for 2,4-dinitrotoluene, bromoform, chloroform, and hexachlorobenzene, including quality control information. If the department and Lyondell concur that the analytical results obtained during the 12 monthly testing periods have been significantly below the delisting levels in condition (3)(B), Lyondell may replace the testing required in condition (1)(C) with the testing required in condition (1)(D).

(1)(D). Subsequent Organic Testing

After concurrence by the department, Lyondell may substitute the following testing conditions for those in condition (1)(C). Lyondell must continue to analyze quarterly grab water samples from the fire water pond and the incinerator blowdown stream. Lyondell must report to the department the unit operating conditions and analytical data (reported in milligrams per liter), for 2,4-dinitrotoluene, bromoform, chloroform, and hexachlorobenzene, including quality control information. Grab water samples from the fire water pond and the incinerator blowdown stream must be taken during the first month of each quarterly period. These quarterly samples must be

analyzed for the constituents listed in condition (3)(B) prior to disposal of the source water. If delisting levels for any constituents listed in condition (3)(B) are exceeded in any quarterly sample, Lyondell must re-institute testing as required in condition (1)(C).

(2). Waste Holding and Handling

Lyondell must treat water in the fire water pond and the incinerator blowdown stream as hazardous wastes until the verification testing is completed, as specified in conditions (1)(A) - (1)(D), and the wastewater has satisfied the delisting criteria, as specified in condition (3). If the levels of constituents in the samples from the fire water pond and the incinerator blowdown stream are below all of the applicable levels set forth in condition (3), then the incinerator direct contact cooling wastewater and the fire suppression automatic sprinkler ("deluge") system wastewater thereby become nonhazardous. If hazardous constituent levels in any monthly grab sample equal or exceed any of the delisting levels set in condition (3), the wastewater must be managed and disposed of in accordance with Subtitle C of RCRA until the wastewater meets the delisting levels. Lyondell must repeat the analyses for the constituents listed in conditions (3)(A) and (3)(B) prior to disposal.

(3). Delisting Levels

Concentrations in conditions (3)(A) and (3)(B) must be measured in the extract from the samples by the method specified in LAC 33:V.4903.E. All concentrations in the wastewater must be less than the following levels (all units are milligrams per liter).

(3)(A). Inorganic Constituents (all units are milligrams per liter) arsenic—0.5; barium—50.0; chromium—1.0; lead—1.0; nickel—10.0; vanadium—15; and zinc—200.

(3)(B). Organic Constituents (all units are milligrams per liter) 2,4-dinitroluene-—0.02; bromoform—10.0, chloroform—0.14; hexachlorobenzene—0.13.

(4). Changes in Operating Conditions

If Lyondell significantly changes the operating conditions specified in the petition, Lyondell must notify the department in writing. Following receipt of written approval by the department, Lyondell must re-institute the testing required in conditions (1)(A) and (1)(C) for a minimum of four consecutive months. Lyondell must report unit operating conditions and test data required by conditions (1)(A) and (1)(C), including quality control data, obtained during this period no later than 60 days after the changes take place. Following written notification by the department, Lyondell may replace testing conditions (1)(A) and (1)(C) with (1)(B) and (1)(D). Lyondell must fulfill all other requirements in condition (1).

Table 1 - Wastes Excluded
Marathon Oil Co., Garyville, LA
* * *
[see prior text]

Table 1 - Wastes Excluded Motiva Enterprises LLC, Norco, LA

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[see prior text]

Table 1 - Wastes Excluded Syngenta Crop Protection, Inc., St. Gabriel, LA

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[see prior text]

Table <u>21 – One-Time</u> Wastes Excluded Murphy Exploration and Production Company, Amelia, LA

Hazardous waste incinerator ash was generated by the combustion of hazardous wastes and nonhazardous wastes in a rotary kiln incinerator at Marine Shale Processors in Amelia, Louisiana. In 1986 and 1987, this ash was used as fill material for the Rim Tide barge slip area at Murphy Exploration and Production Company (Murphy) in Amelia, Louisiana. For the purpose of this exclusion, ash used as fill material by Murphy includes all hazardous waste codes listed in LAC 33:V.4901. This is a one-time exclusion for a maximum volume of 6,200 cubic yards of ash subsequent to its excavation from the Rim Tide barge slip area at Murphy for the purpose of transportation and disposal in a Subtitle D landfill after June 20, 2007.

Appendix F. – Appendix F. Table 2. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq. HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, LR 20:1000 (September 1994), amended by the Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:944 (September 1995), LR 22:830 (September 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 23:952 (August 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:2397 (December 1999), LR 26:2509 (November 2000), LR 29:1084 (July 2003), repromulgated LR 29:1475 (August 2003), amended by the Office of Environmental Assessment, LR 30:2464 (November 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 33:445 (March 2007), LR 33:825 (May 2007), LR 33:1016 (June 2007), LR 34:73 (January 2008), LR 34:1021 (June 2008), LR 34:**.